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Programme element II.d (i)

Matters left pending and other issues arising from the programme elements of the Intergovernmental Panel on Forests process

Issues that need further clarification: underlying causes of deforestation and forest degradation

Report of the Secretary-General

Summary

During the second session of the Intergovernmental Forum on Forests (IFF), Governments held background discussions on programme element II.d (i). Information on this subject was introduced (E/CN.17/IFF/1998/10), which referred to proposals for action addressed to countries by the Intergovernmental Panel on Forests (IPF) and contained information on United Nations Environment Programme activities to support their implementation.

Deforestation and forest degradation are widely recognized as one of the most critical environmental problems facing human society, with serious long-term economic, social and ecological consequences. During recent years, this issue has received much attention from policy makers as well as the general public, with vivid images of cleared forests and burning trees around the world. The effect of deforestation on biodiversity and climate change has been the subject of scientific studies and many documentaries.

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The present report has been prepared to support substantive discussion on programme element II.d (i) during the third session of IFF. Section II contains a brief overview of major policy issues related to underlying causes, in particular forest-policy failures, market failures and other socio-economic factors influencing deforestation. Section III summarizes the major outcomes of the regional processes and of the Global Workshop on Underlying Causes of Deforestation and Forest Degradation held at San José, Costa Rica, in January 1999. Section IV contains conclusions and proposals for action, encompassing the socio-economic consequences of deforestation and the impacts of economic sectoral policies on the forest sector.

Contents

		Paragraphs	*Page*
I.	Introduction	1–5	3
	A. Mandate	1	3
	B. Guidance from the outcome of the second session of the Intergovernmental Forum on Forests	2–3	3
	C. General overview of the proposals for action of the Intergovernmental Panel on Forests	4	3
	D. Scope	5	4
II.	Brief overview of major policy issues related to underlying causes of deforestation	6–18	4
	A. Policy failures	9–12	5
	B. Market failures	13–15	6
	C. Other factors influencing deforestation	16–18	6
III.	Outcome of the joint government-non-governmental organizations initiative to contribute to the Intergovernmental Forum on Forests	19–32	7
	A. Outcome of the regional workshops and indigenous peoples meeting	20–29	7
	B. Results of the Global Workshop on Underlying Causes of Deforestation and Forest Degradation	30–32	9
IV.	Conclusions and proposals for action	33–39	11

I. Introduction

A. Mandate

1. Programme element II.d (i) was defined by the Intergovernmental Forum on Forests (IFF) at its first session as:

> "*Consider other issues arising from the programme elements of the Intergovernmental Panel on Forests process ..., inter alia*, analysis of underlying causes, in particular international causes, including transboundary economic forces, of deforestation and forest degradation, taking into account the historical perspective and the pressures exerted on forests by other sectors, notably agriculture, in the quest for food security ..." (see E/CN.17/IFF/1997/4, para. 7, category II.d).

B. Guidance from the outcome of the second session of the Intergovernmental Forum on Forests

2. At its second session, IFF identified several considerations, including policy coordination inside and outside the forest sector, that were relevant for the preparation of the substantive discussion at the third session of IFF, and that would ensure policy consistency to overcome major obstacles when addressing the underlying causes of deforestation and forest degradation. Mechanisms for a fair and equitable share of benefits, including payment arising from the use of traditional technologies developed by indigenous people, forest owners and local communities for sustainable forest management, were also noted during the second session of IFF. The Forum welcomed the initiative on underlying causes of deforestation and forest degradation, including the Global Workshop to be held at San José, Costa Rica, from 18–22 January 1999, organized by non-governmental organizations, with the support of Costa Rica and the United Nations Environment Programme (UNEP).

3. At its second session, the Forum noted the importance of including in documentation for the third session issues related to, *inter alia*, macroeconomic and rural development policies, poverty, market forces, trade constraints, forest fires and civil strife. Distinction between underlying causes in forested countries and low forest-cover countries was also recommended. The examination of difficulties in the implementation of policies to combat deforestation and forest degradation, including the financial cost and institutional and technological requirements of such policies, in particular in developing countries, was stressed. The Forum requested that documentation for its third session should provide a comprehensive analysis and relevant proposals for enhancing international cooperation to address the underlying causes of deforestation and forest degradation.

C. General overview of the proposals for action of the Intergovernmental Panel on Forests

4. In terms of the underlying causes of deforestation, the IPF proposals for action urged all countries, with the support of international organizations and the participation of major groups, to take, *inter alia*, the following significant steps:

(a) *Case studies*: to undertake case studies using the diagnostic framework in order to identify the most important underlying causes of deforestation and forest degradation;

develop and test the usefulness of the framework as an analytical tool in assessing options for utilization of forest and forest lands; and refine the framework, disseminate the results and apply it more widely, as appropriate;

(b) *In-depth studies*: to prepare in-depth studies of the underlying causes at the national and international levels of deforestation and forest degradation; to analyse comprehensively the historical perspective of the causes of deforestation and forest degradation in the world, as well as other international underlying causes of deforestation and forest degradation, including transboundary economic forces;

(c) *Global workshop*: to support the convening, as soon as possible, of a global workshop on the international underlying causes of deforestation and forest degradation, and their relationship to national underlying causes;

(d) *Land tenure and benefit-sharing*: to formulate policies aiming at securing land tenure for local communities and indigenous people, including policies, as appropriate, aimed at the fair and equitable sharing of the benefits of forests;

(e) *National strategies*: to formulate and implement national strategies, through an open and participatory process, for addressing the underlying causes of deforestation, and if appropriate to define policy goals for national forest cover as inputs to the implementation of national forest programmes.

D. Scope

5. The present report summarizes the main policy-relevant information regarding issues involved in addressing the underlying causes of deforestation and forest degradation. The document has been prepared to support the substantive discussion on this topic at the third session of IFF, focusing on major policy issues, as well as policy and market failures related to underlying causes of deforestation. The report also presents a brief introduction to the major outcomes of the joint government-non-governmental organizations initiative on underlying causes of deforestation and forest degradation. The present report, prepared by the IFF secretariat, is based on inputs received from UNEP and the global secretariat of the government-non-governmental organizations initiative, in collaboration with member organizations of the informal, high-level Inter-Agency Task Force on Forests.

II. Brief overview of major policy issues related to underlying causes of deforestation

6. Although the world's forest area has been declining for centuries, in the last half of the twentieth century that process has accelerated to an alarming rate. Since the 1960s, there has been a major change in the rate at which forests are cleared. A recent study (FAO, 1997)[1] reports annual rates of deforestation in developing countries of 15.5 million hectares (ha) for the period 1980–1990 and 13.7 million ha for the period 1990–1995. The total forest area lost during the 15-year period was more than 220 million ha, an area much larger than the total land area of Mexico. Moreover, most of the deforestation is concentrated in relatively few countries. Food and Agriculture Organization of the United Nations (FAO) statistics indicate that the "top" 10 deforesting countries account for 7.4 million ha and more than half the annual deforestation, suggesting that if fundamental changes in land use can be made in those countries, it will have significant impacts on reducing forest loss.

7. In 1997 and 1998, forest fires caused serious forest loss in the world. The widespread fires were related to new commercial agricultural projects, land clearing for tree and agricultural plantations, land clearing for new cattle pastures, dry residues left in the forest after logging, and slash-and-burn agriculture. The unusually dry climate conditions caused by the El Niño phenomena further complicated the situation.

8. Despite the apparent precision of the figures/statistics for the rate of deforestation, the exact area of deforestation for each year is unknown. The accuracy of estimates is hampered by the lack of reliable time sequence land-use maps, different standards for forest and non-forest classification, inadequate ground validation of satellite imagery, and the institutional weaknesses of governmental forest departments around the world.

A. Policy failures

9. Policy failures in forestry and other sectors affecting forests are one of the most common causes of deforestation. Governmental policies are, perhaps, the most important factor in determining whether forests are to be sustainably used and managed. Logging concession policies, for example, have frequently resulted in inefficient use of forests as renewable resources. Concession periods, usually less than 20 years, are significantly shorter than natural regeneration periods of a timber stand (averaging 20 to 50 years). Also, rents through royalties, license fees and reforestation taxes are typically much lower than the real cost of replacing the timber stock and restoring logged areas. In addition, the Governments of most timber-exporting nations have generally been unable to collect full rent from log harvests through taxes and royalties. Aside from contributing to economic and environmental losses, such timber concessions can promote corruption and result in progressive decapitalization of the country's natural resource base.

10. By distorting the true costs or prices of forest resources, public policies often provide an incentive for short-term exploitation of forests. Public policies have frequently failed to provide adequate incentives for sustainable forest management or to promote reforestation. Pricing policies, tax incentives, direct government subsidies and other subsidies to encourage private investments in other sectors, such as agriculture, energy, mining, industry and transportation, have had major negative effect on forests. Such policies, by regulating prices and providing tax shelters and subsidized credits to livestock and agricultural producers, have expanded the agricultural frontier, often at the expense of natural forests.

11. Correcting the distortionary effects of inefficient incentive policies through proper regulations and land-use policies will improve forest use and reforestation, but improving market and price policies raises some difficult questions. One is that the externality costs (such as replacement and environmental costs resulting from harvesting) associated with forest use are not borne by the domestic economy alone; some have regional and global consequences. Sovereign Governments can be expected to address only domestic externalities in their pricing and taxation policies. Global externalities could be addressed through cooperation among nations, and perhaps through compensation arrangements between producers and beneficiaries of environmental and other services provided by forests.

12. In some countries, agricultural policies have also created incentives for deforestation. The commercialization of agriculture has typically led to monocultural plantations of export crops on fertile lowland areas; traditional farmers who once occupied those areas have been displaced onto more fragile uplands or natural forests. The concentration of shifting

cultivators on a smaller or poorer resource base typically sets in motion a downward spiral of reduced agricultural productivity, increased forest depletion and worsened rural poverty, as cropland fallow periods are shortened and soil fertility declines. An estimated 60 per cent of the world's poorest people have been pushed into ecologically fragile environments (tropical forests, drylands and hilly areas) as a result of agricultural expansion.

B. Market Failures

13. Market failure is another significant underlying cause of deforestation. The tropical natural forests are mostly publicly owned, and stumpages are then administratively priced by various fees and royalties, generally at lower levels than the markets would allow for. In privately owned natural forests, monopsonies or oligopsonies mostly create local market failures. The market failures of timber and fuelwood stumpages often go unnoticed.

14. The problem of valuing non-marketable environmental services is a good example of market failure. Perhaps biodiversity and carbon sequestration are the extreme cases to illustrate the situation in which benefits are mostly global but preservation costs local. These services, however, have missing global (global appropriation failure) and lower-level markets. While wood products' monetary values may have partly reflected the monetary value of the forests, the non-wood benefits have only exceptionally been materializing in the monetary value of the standing forest. The low monetary value of a standing forest is one factor that decreases investments in promoting the sustainable management of natural forests.

15. Inherent market failures have usually been compounded by government policy distortions. Rather than correcting the failure of the market, government interventions have often aggravated the existing incentives for excessive forest exploitation. Despite the national political will to seriously conserve forests, a policy mechanism for coordination is often missing. When the principal controls of deforestation — markets and public policies — are both failing, deforestation can only be expected to continue.

C. Other factors influencing deforestation

16. Population growth and rural poverty intensify the pressure to convert forest areas to other uses, as well as to exploit forests for short-term benefits. Human populations are growing rapidly, leading to growing domestic and international demands for primary goods and services from natural forests. With few exceptions, poverty and low incomes are also typical in countries with a high rate of deforestation. Due to the low productivity of agricultural land, the majority of the rural poor rely heavily on forests and woodlands for income and subsistence. While many traditional rural communities have developed comparatively sustainable forms of resource use, many others are compelled by circumstances often beyond their control to use forests unsustainably for short-term gains.

17. The low performance of the national economy in some developing countries, combined with high external debts, pushes countries to use forest resources unsustainably for short-term gains. External debt in developing countries is another underlying cause driving deforestation. Recent statistics show that 12 countries, which owe about half the total third world external debt, are responsible for more than 70 per cent of global annual deforestation.[2] The debt burden provides an inducement to liquidate forest capital for much-needed foreign exchange. Debt service requirements also provide a justification for expanding export crop production into forest areas.

18. The boreal forests provide one of the world's clearest examples of the link between the high consumption, late twentieth century industrial society and the impact on natural ecosystems. Today, one fifth of the world's population uses 85 per cent of natural resources. Generally, the demands of consumption for paper, timber, metals and energy provide the incentive to exploit natural resources too quickly and too intensively. High consumption is intimately related to industrialization, both driving industry and in turn being driven by advertising and a shift to disposable and short-life products. Lack of local control is another important problem, alienating people from the land and resulting in top-down decisions that may not be suitable for local conditions. In Eastern Europe, on the other hand, the sudden development of land from state to private control is seen as a problem, encouraging short-term exploitation by new owners who often have no prior experience in forest management.

III. Outcome of the joint government-non-governmental organizations initiative to contribute to the Intergovernmental Forum on Forests

19. The joint government-non-governmental organizations initiative for addressing the underlying causes of deforestation and forest degradation constituted an extensive participatory process which was guided by more than 40 case studies, many substantive articles and papers, and contributions from all over the world.

A. Outcome of the regional workshops and indigenous peoples meeting

20. The joint Government-NGOs Initiative on underlying causes of deforestation included the preparation and presentation of case studies from different regions of the world in seven regional consultations and one meeting of indigenous people. Presentations provided the basis for the identification of the common underlying causes of deforestation and forest degradation, followed by the identification of actions and solutions to address them. The process involved the participation of local community representatives, non-governmental organizations, academics, government officials and representatives from international and to a lesser extent business organizations.

21. The eight workshops and the more than 40 case studies reflect a wide range of causes, actors and possible solutions in extremely diverse social, political, economic, cultural and environmental contexts. However, they coincided in the identification of a number of key causes, which are at the root of deforestation and forest degradation processes in all types of forests. Important similarities were also identified regarding a number of actors — both domestic and international — which are part of the problem and therefore can become part of the solution. The categories of issues identified are summarized below.

Land tenure issues

22. Many of the case studies and regional workshops identified issues related to land tenure as a major underlying cause. Although situations vary widely, the following can be highlighted as the most common:

(a) The non-recognition of the territorial rights of indigenous and other traditional people, resulting in the invasion of those territories by external actors;

(b) The lack of legally recognized land titles by local communities;

(c) Government-led or spontaneous colonization processes into the forests, stemming from inequitable land-tenure patterns in agricultural areas;

(d) Privatization of forests for the benefit of large-scale private or corporate landowners.

Resource management

23. The way in which natural resources are managed at the national level — expressed in explicit or implicit policies — was also identified as a major underlying cause. Most of these policies result in negative impacts and conflict with other policies and practices aimed at forest conservation. Among the most common are the following:

(a) Lack of recognition of multiple values of forests, which are either visualized only as a source of wood materials or as occupying land which could be dedicated to other activities, such as agriculture or cattle-raising;

(b) Lack of empowerment and participation of local communities in decisions over forest management;

(c) The promotion of large-scale development projects with high negative impacts on forests;

(d) Economic and other incentives which result in deforestation;

(e) Issues of governance, including corruption, human rights abuses, inadequate enforcement of existing laws, and lack of institutional capacity to adequately manage forests;

(f) Dominance of industry's interest in products which affect forests, including timber, pulp and paper, mining, oil and shrimp farming.

Trade issues

24. Trade — both national and international — is neither good nor bad in itself. However, it was identified as a major underlying cause (particularly within the current trade liberalization process) linked to other underlying causes, such as:

(a) Unsustainable extraction of forest products;

(b) Substitution of forests by other productions, particularly aimed at the international market, such as pulpwood and other tree plantations, cattle-raising and shrimp farming;

(c) Rising consumer demand resulting in unsustainable consumption patterns of a wide variety of products extracted either from forests or from productive activities which substitute forests;

(d) Undervaluation of forest products.

International economic relations

25. Practically all regional workshops identified underlying causes stemming from the current market-economy model but with different levels of importance, following the high consumption-low consumption (or rich-poor) country divide. Among the major identified underlying causes were:

(a) Macroeconomic policies imposed on less developed countries, including structural adjustment programmes;

(b) External debt and its service/repayment;

(c) Unfair trade relationships;

(d) Poorly directed foreign aid programmes;

(e) Lack of regulation of transnational companies in both "home" and "host" countries.

Social exclusion

26. Social exclusion, as the process that marginalizes a large part of the population from the mainstream of development, was identified as an underlying cause, but not with the high profile received in the past. It was identified as a consequence of a number of national and international policies which resulted in the creation and increase of social exclusion, which in turn resulted in unsustainable use of forest lands. Regarding population growth, only one workshop considered it as an underlying cause, while several case studies mentioned it as being important.

27. It should be noted that underlying causes categorized in one group are influenced by underlying causes categorized in other groups. Each category at least helps to clarify in each case who the main actor could be to address the different underlying causes — a national Government, a group of Governments, international organizations or the international community as a whole.

28. The processes carried out under the initiative seem to agree in concluding that, to address deforestation and forest degradation, there is a need to:

(a) Identify the chain of causality in each country, with the informed participation of all stakeholders;

(b) Create democratic mechanisms for stakeholder participation in decision-making about resource management, including the promotion of equitable land-tenure systems;

(c) Introduce changes to national international macroeconomic policies, including changes to the current trade liberalization process;

(d) Modify current unsustainable consumption patterns.

29. Responsibility for the above issues is in the hands of many actors, including Governments, civil society, multilateral institutions, research organizations and bilateral aid agencies. Within such a wide range of actors, there is a need to coordinate a process leading to agreements on specific commitments for addressing underlying causes at both the national and international levels.

B. Results of the Global Workshop on Underlying Causes of Deforestation and Forest Degradation

San José, Costa Rica, 18–22 January 1999

30. The Global Workshop was attended by a diverse group of participants representing Governments, international and non-governmental organizations, local communities, indigenous peoples, academia, trade unions and the private sector. The Workshop was hosted by the Government of Costa Rica and organized by an organizing committee composed of UNEP, Governments, and non-governmental organizations. The workshop was successful in formulating a wide range of innovative actions.

31. In addition, the Workshop identified several underlying causes that are not part of the deliberations in IFF. The Workshop noted that underlying causes, be it in tropical forests or temperate forests, often lie outside the forest sector. Its final report, including recommendations, specific actions and actors, will be made available to IFF at its third session.

32. The Workshop identified a set of categories for urgently needed actions in order to address effectively the underlying causes of deforestation and forest degradation; they are described in the table.

Urgent actions required to address effectively the underlying causes of deforestation and forest degradation[a]

Category	*Actions*
1. Trade and consumption	1.1. Change unsustainable consumption and production patterns
	1.2. Implement voluntary certification for sustainable forest management
	1.3. Improve imbalance of international trade and sustainable development regimes
2. Improving indigenous local peoples', communities' and other stakeholders' involvement in general, and solving inequities in land tenure in particular	2.1. Favour indigenous peoples' rights and the collective rights of local communities to access, use and manage natural resources, land and territories
	2.2. Improve transparency and accountability and land tenure
	2.3. Design legal instruments consistent with indigenous peoples' and local communities' rights
3. Resolving investment aid policies/policies and financial flows	3.1. Change inappropriate development strategies, design new structural adjustment programmes and strengthen government capacity
	3.2. Address debt servicing and debt creation issues
	3.3. Eliminate perverse incentives and subsidies
	3.4. Increase private capital flows for sustainable forest management
	3.5. Address governance and corruption problems
	3.6. Strengthen national institutions, and improve policy implementation and regulation
4. Valuation	4.1. Recognize the cultural values of forests
	4.2. Recognize land tenure rights, especially community and collective rights
	4.3. Improve valuation of community forestry and non-timber forests products
	4.4. Recognize the value of forests as ecosystems

[a] Based on the report of the Global Workshop on Addressing the Underlying Causes of Deforestation and Forest Degradation, San José, 18–22 January 1999.

IV. Conclusions and proposals for action

Conclusions

33. The underlying causes of deforestation and forest degradation are deeply ingrained in the totality of national and international policies, economic and development plans. Strategies to arrest the underlying causes must be sought in the broader policy framework of development.

34. The social and economic consequences of deforestation are many, often having devastating long-term impacts. Destruction of forests leads to the disappearance of all potential future revenue and future employment that could be derived from their sustainable management for timber and non-wood products. The most short-sighted ecological consequence of deforestation is the loss of biodiversity, which means the extinction of species, varieties of plants and animals, many of which may have never been scientifically documented. Economically, the loss of forest biodiversity, an important part of earth's basic life support system, is eroding the potential base for future human development.

35. Global consumption and the market that services it has become the main engine of the global economy. With the most wealthy 20 per cent of the population consuming 85 per cent of the world's resources, levels of consumption continue to climb. Markets are volatile and often ephemeral, discouraging long-term investments in prudent resource use and encouraging short-term planning and exploitation practices. Timber extraction is considered by some to be the main cause of forest loss in tropical frontier forests.

36. Many other commodities traded on the world market are also linked with forest loss. Minerals, oil, shrimps and cocoa are examples of commodities that are often extracted or grown in areas cleared from forests. Yet many other cash crops cultivated outside forests also lead to forest loss by displacing peasant farmers from the best agricultural land and forcing them into the forests in search of a livelihood. Land concentration and the creation of wealthy elites with significant influence in national economies are often driven by international markets in cash crops. The economic policies currently being promoted encourage deregulation and increasing private-sector investment in export-oriented production. International legal regimes developed under the General Agreement on Tariffs and Trade and the World Trade Organization may discourage countries from restricting trade on environmental grounds since they are considered "non-tariff barriers" to free trade. This has made the regulation of trade to prevent forest destruction difficult, and has further increased the power and influence of the free trade lobby.

37. In many developing countries, control and ownership of forests have made a rapid transition from communities to States to the private sector. Today, 50 of the largest forest products corporations between them control some 140 million ha of forests, an area the size of the total forest estate of Europe. The private sector has an important role to play in forest policy development and implementation, including issues related to pollution control, forest conservation and protected areas, and land-use policies.

38. Most aid budgets to recipient countries are determined by macroeconomic considerations as a means of securing the economies of recipient countries through adjusting balance of payments and facilitating debt servicing. Development assistance may thus have very broadly defined goals, and those planning these large disbursements of money may not always integrate environmental considerations into such grants and loans. Structural adjustment lending, which aims to promote exports and cut back national expenditures, has often indirectly encouraged the intensification of forest utilization, without measures being simultaneously taken to strengthen Governments' regulatory capacity.

Proposals for action

39. The Intergovernmental Forum on Forests may wish to urge and encourage countries to:

(a) Identify, with support from international organizations and with the informed participation of all stakeholders, the chain of causality in each country of the underlying causes of deforestation and forest degradation;

(b) Create democratic mechanisms for stakeholder participation in decision-making about resource management, including the promotion of equitable land-tenure systems;

(c) Support land regulation as a means to clearly define land ownership and rights for the use of forest resource;

(d) Develop mechanisms to improve land access and the use of forests resources by small-scale owners;

(e) Train human resources so as to build leadership capacity in communities for sustainable forest management;

(f) Provide technical guidance, legal instruments and economic incentives on sustainable forest management and environmental management at the community level;

(g) Identify and measure the impact of perverse subsidies and incentives in the forest and non-forest sectors (particularly agriculture, mining and hydropower), which may contribute to deforestation and forest degradation;

(h) Request international financial organizations to analyse impacts of foreign debt on forest resources, and in cooperation with donor countries, to explore innovative debt reduction reward schemes for countries that take significant steps to halt deforestation and forest degradation.

Notes

[1] Food and Agriculture Organization of the United Nations, *State of the World Forests, 1997* (Rome, 1998).

[2] See World Bank, *World Development Report*, 1998/99 (Washington, D.C., Oxford University Press, 1998); and United Nations Development Programme, *Human Development Report, 1998* (New York, Oxford University Press, 1998).